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Technology Center 2600

Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

- Sub C1
- AI
1. (Currently Amended) A method of merging images of segments of a view, comprising:  
receiving a first image representing a first segment of the view and a second image  
representing a second segment of the view, ~~the images being received from a remote location  
over a network;~~  
determining the position of the second segment of the view relative to the first segment of  
the view without the aid of positioning information provided by a human operator;  
blending the first image with the second image based solely on the content of the images  
and the determined position of the second segment relative to the first segment to merge the first  
image and the second image into a panoramic image of the view, wherein the blending  
comprises:  
dividing the second image into a first portion and a second portion based on the  
position of the second segment relative to the first segment; and  
compositing the first portion of the second image on the first image at a relative  
position of the second segment relative to the first segment to produce the panoramic image, the  
compositing of the first portion of the second image causing the first portion to mask out a part  
of the first image; and  
~~transmitting the panoramic image over the network.~~
  2. (Original) The method of claim 1 further comprising:  
determining whether the second image overlaps the first image based on the position of  
the second segment relative to the first segment, wherein the blending the first image and the  
second image is only performed when the second image overlaps the first image.

3. (Original) The method of claim 1 further comprising:  
correcting perspective distortion in the second image relative to the first image prior to  
blending the first image with the second image.
4. (Canceled)
5. (Previously Presented) A method of merging a set of images, each image representing a  
corresponding segment of a view, the set including a first image representing a first segment of  
the view, a second image representing a second segment of the view, and a third image  
representing a third segment of the view, where the third segment of the view overlaps both the  
first segment and the second segment of the view, the method comprising;  
determining a first relative position of the third segment relative to the first segment of  
the view by processing the content of the third image and the first image;  
determining a first overlap area of the first image and the third image based on the  
determined first relative position;  
determining a second relative position of the third segment relative to the second segment  
of the view by processing the content of the third image and the second image;  
determining a second overlap area of the second image and the third image based on the  
determined second relative position; and  
if the first overlap area is greater than the second overlap area, offsetting the position of  
the third image relative to the first image and the second image based on the determined first  
relative position;  
otherwise, offsetting the position of the third image relative to the first image and the  
second image based on the determined second relative position.
6. (Original) The method of claim 5 further comprising:  
correcting perspective distortion in at least one of the set of images prior to blending the  
set of images.

7. (Previously Presented) The method of claim 5 further comprising:  
determining which of the images is a central one and which are peripheral images; and  
using the central image as an initial reference image in correcting perspective distortion  
in peripheral images.
8. (Previously Presented) The method of claim 7 further comprising:  
determining what pair-wise overlap areas exist between the central image and each of the  
peripheral images; and  
selecting as the first peripheral image to have perspective distortion corrected a peripheral  
image having a maximum pair-wise overlap area with the central image relative to the other  
peripheral images.
9. (Original) The method of claim 8 further comprising:  
prior to blending the set of images:  
determining a first overlap area between a second one of the peripheral images  
and the central one of the images;  
determining a second overlap area between the second one of the peripheral  
images and the first peripheral one of the images;  
if the first overlap area is greater than the second overlap area, correcting  
perspective distortion in the second one of the peripheral images relative to the central one of the  
images.
10. (Original) The method of claim 9 further comprising:  
prior to blending the set of images:  
if the first overlap area is less than the second overlap area, correcting perspective  
distortion in the second one of the peripheral images relative to the first peripheral one of the  
images.
11. (Previously Presented) The method of claim 5, further comprising blending the third  
image with the first and second image, wherein the blending includes:

dividing the third image into a first portion and a second portion, based on the first relative position; and

compositing the first portion of the third image on the first image at the first position to produce a composite image, the compositing causing the first portion to mask out a part of the first image.

12. (Previously Presented) The method of claim 11 wherein blending the third image with the first and second image further includes:

dividing the second image into a third portion and a second portion, based on a relative position of the second segment of the view relative to the first segment of the view;

dividing the third portion into a fifth portion and a sixth portion, based on the second relative position; and

compositing the fifth portion of the third image on the composite image based on the second relative position to form the panoramic image, the compositing of the fifth portion causing the fifth portion to mask out a part of the composite image.

13. (Original) A method of merging images of segments of a view, comprising:

transmitting a first image representing a first segment of the view to a server;

transmitting a second image representing a second segment of the view to the server without providing any information about the position of the second segment relative to the first segment; and

receiving a panoramic image of the view from the server, the panoramic image being a composite of the first image and the second image.

14. (Currently Amended) The method of claim 13[[14]], wherein the first image is transmitted from a first computer and the second image is transmitted from a second different computer.

15. (Currently Amended) An article comprising a computer-readable medium on which are tangibly stored computer-executable instructions for merging images of segments of a view, the

stored instructions being operable to cause a computer to:

receive a first image representing a first segment of the view and a second image representing a second segment of the view, ~~the images being received from a remote location over a network;~~

determine the position of the second segment of the view relative to the first segment of the view without the aid of positioning information provided by a human operator; and

blend the first image with the second image based solely on the content of the images and the determined position of the second segment relative to the first segment to merge the first image and the second image into a panoramic image of the view, wherein the instructions to blend comprise instructions to:

divide the second image into a first portion and a second portion based on the position of the second segment relative to the first segment; and

composite the first portion of the second image on the first image at a relative position of the second segment relative to the first segment to produce the panoramic image, causing the first portion to mask out a part of the first image; and

~~transmit the panoramic image over the network.~~

16. (Currently Amended) The article of claim 15~~16~~ wherein the instructions that determine the position and blend the first and second images operate without positioning information from a human operator.

17. (Currently Amended) The article of claim 15~~16~~ wherein the stored instructions further comprise instructions operable to cause the computer to:

determine whether the second image overlaps the first image based on the position of the second segment relative to the first segment, wherein blending the first image and the second image is only performed when the second image overlaps the first image.

18. (Currently Amended) The article of claim 15~~16~~ wherein the stored instructions further comprise instructions operable to cause the computer to:

correct perspective distortion in the second image relative to the first image prior to blending the first image with the second image.

19. (Canceled)

20. (Previously Presented) An article comprising a computer-readable medium which stores computer-executable instructions for merging a set of images, each image representing a corresponding segment of a view, the set including a first image representing a first segment of the view, a second image representing a second segment of the view, and a third image representing a third segment of the view, where the third segment of the view overlaps both the first segment and the second segment of the view, the instructions being operable to cause a computer to:

determine a first relative position of the third segment relative to the first segment of the view by processing the content of the third image and the first image;

determine a first overlap area of the first image and the third image based on the determined first relative position;

determine a second relative position of the third segment relative to the second segment of the view by processing the content of third image and the second image;

determine a second overlap area of the second image and third image based on the determined second relative position; and

if the first overlap area is greater than the second overlap area, offset the position of the third image relative to the first image and the second image based on the determined first relative position;

otherwise, offset the third image relative to the first image and the second image based on the determined second relative position.

21. (Currently Amended) The article of claim 2021 wherein the stored instructions further comprise instructions operable to cause the computer to:

blend the set of images; and  
correct perspective distortion in at least one of the set of images prior to blending the set of images.

22. (Previously Presented) The article of claim 21 wherein the stored instructions further comprise instructions operable to cause the computer to:

determine which of the images is a central one and which are peripheral images; and  
use the central image as an initial reference image in correcting perspective distortion in peripheral images.

23. (Currently Amended) The article of claim 2221 wherein the stored instructions further comprise instructions operable to cause the computer to:

determine what pair-wise overlap areas exist between the central image and each of the peripheral images; and

select as the first peripheral image to be corrected for perspective distortion a peripheral image having a maximum pair-wise overlap area with the central image relative to the other peripheral images.

24. (Currently Amended) The article of claim 2324 wherein the stored instructions further comprise instructions operable to cause the computer to:

prior to blending the set of images:

~~determining~~ determine a first overlap area between a second one of the peripheral images and the central one of the images;

~~determining~~ determine a second overlap area between the second one of the peripheral images and the first peripheral one of the images; and

if the first overlap area is greater than the second overlap area, ~~correcting~~ correct perspective distortion in the second one of the peripheral images relative to the central one of the images.

25. (Currently Amended) The article of claim 2425 wherein the stored instructions further comprise instructions operable to cause the computer to:

prior to blending the set of images:

if the first overlap area is less than the second overlap area, ~~correcting~~ correct perspective distortion in the second one of the peripheral images relative to the first peripheral one of the images.

26. (Currently Amended) The article of claim 2021 wherein the stored instructions further comprise instructions operable to cause the computer to blend the third image with the first and second image, wherein the blending includes:

dividing the third image into a first portion and a second portion, based on the first position; and

compositing the first portion of the third image on the first image at the first position to produce a composite image[[;]], the compositing causing the first portion to mask out a part of the first image.

27. (Currently Amended) The article of claim 2627 wherein blending the third image with the first and second image further includes:

dividing the second image into a third portion and a second portion, based on a relative position of the second segment of the view relative to the first segment of the view;

dividing the third portion into a fifth portion and a sixth portion, based on the second relative position; and

compositing the fifth portion of the third image on the composite image based on the second relative position to form the panoramic image, the compositing of the fifth portion causing the fifth portion to mask out a part of the composite image.

28. (Currently Amended) The method of claim 1 further comprising:

prior to blending the set of images:

determining which of the images is a central one and which are peripheral images;

and



using the central image as an initial reference image in correcting perspective distortion in peripheral images.

29. (Previously Presented) The method of claim 28 further comprising:

determining what pair-wise overlap areas exist between the central image and each of the peripheral images; and

selecting as the first peripheral image to have perspective distortion corrected a peripheral image having a maximum pair-wise overlap area with the central image relative to the other peripheral images.

30. (New) The method of claim 1 further comprising:

receiving the images from a remote location over a network; and  
transmitting the panoramic image over the network.

31. (New) The article of claim 15 wherein the stored instructions further comprise instructions operable to cause the computer to:

receive the images from a remote location over a network; and  
transmit the panoramic image over the network.